

there is suitable food and water. It is very familiar about all the towns and houses during the colder months.

I have observed it but once in the Catalina Mountains—on October 2, 1884, when I took a female (No. 1012), the only one seen, at an altitude of 4500 feet.

(To be continued.)

SOME UNDESCRIBED PLUMAGES OF NORTH AMERICAN BIRDS.

BY GEORGE B. SENNETT.

Sterna fuliginosa. SOOTY TERN.

I HAVE been able to find but one attempt at describing the young of this species while yet in the down, and that description must have applied to older specimens than those before me. In 'The Ibis,' 1868, p. 286, Captain Sperling (whose description is referred to in B. B. & R. Water Birds, Vol. II, p. 314) describes the young as follows: "The young were of a very light sooty color, both above and beneath, the ends of most of the feathers having a white spot the size of a pea, which gives to them a speckled appearance." Saunders, in P. Z. S., 1876, p. 667, says: "The young are dark on the underparts." This indicates his reference to a more advanced stage of growth.

Downy Stage:—Underparts white; throat and sides of neck speckled dark gray and white. The whole upper parts are covered thickly with sooty and white downy tufts, the former tipped with black points and the latter with reddish fulvous points, giving to the whole upper surface a mixed speckled appearance of black, white, and fulvous. In one specimen the dark color predominates and in the other the fulvous.

Aythya collaris. RING-NECKED DUCK.

Downy Stage:—Underparts very pale yellow; forehead and sides of head and neck the same, washed with dark fulvous yellow; the same yellow is on underside of wing and, alternating with brown, covers the side of body. The crown, line down back of neck, wings, and line down tibia to tarsus, whole of centre of back, and spaces between the yellow patches, a rich brown.

Colinus virginianus texanus. TEXAN BOB-WHITE.

First Plumage:—Half grown female, taken Aug. 18, in Texas. Throat and lower belly creamy white; postocular stripe same color barred with brown; crown ashy brown with broad median line of darker brown; auric-

ulars brown. Cervical collar rich brown, white, and fulvous; conspicuous, but not meeting in front. Back light ashy brown with white shaft-lines and tips, and dark brown mottlings toward the ends of the feathers. Coverts and tertiaries strongly marked with patches of dark brown; inner edge suffused. Wings very light brown, barred, spotted, and tipped with dull white. Tail brownish drab, barred with dull white. There is a fulvous tinge on closed wing, rump, and tip of tail. Jugulum light ashy brown with faint white shaft-lines. The remaining underparts, including tibia, show plainly a barred appearance of yellowish white and brown. Bill and feet yellow.

Callipepla squamata castanogastris. CHESTNUT-BELLIED SCALED PARTRIDGE.

First Plumage.:—In the specimen before me, a male, taken October 29, in Texas, the adult plumage is just coming out, but does not yet conceal the first growth of feathers. The bird, I should judge from the size of skin, the feet, and the bill, to be nearly full grown. Top of head light brown, darker in centre, with only the slightest tinge of the drab or light blue common to adults in fresh plumage. The crest is conspicuous and peculiar, forming two prongs or forks, and is composed of four brownish white feathers about three-quarters of an inch long. These crest feathers correspond to the longest and white-tipped ones of adult, but, unlike them, are not ragged or hairlike, being firmly rounded, nearly as much as the plumes of the common Night Heron. The dark brown coverts (so to speak) of the crest are not conspicuous, being just a little longer than the feathers of the crown and are evidently just growing out. The feathers of back are light brownish drab, without edgings, but with white shaft-lines enlarged at the end. The coverts and scapulars are strongly waved with dark brown and rufous, having heavier white shaft-lines than on the back. The tertiaries have the white shaft-lines and waves only on lower end of feathers; the outer edges being strongly mottled with brown and gray. The wings are plain brown, the longest quills being faintly edged with spots of light fulvous gray. Rump brownish blue; tail dark grayish blue barred and speckled with dark brown and ashy white. Throat light bluish gray; the feathers having small dark centres, thus giving a faintly speckled appearance. Breast dark drab with all the feathers showing white shaft-lines as on back. Belly, crissum, and tibia dingy yellowish white, thickly barred with brown and fulvous. Bill very dark brown above and pale below. Feet yellow.

Catharista atrata. BLACK VULTURE.

Downy Stage.:—Entire body densely covered with long silky down of uniform light fulvous color. Throat and lores bare. The whole top of the head is covered with a thick down of two distinct lengths, the longer of which is much shorter than the body down; looking at the head from above, this longer down is seen to grow in such shape as to form a patch having the outlines of a perfect spear-head; the spear-point stands toward

the bird's bill, while the barbs extend backward over each eye, with the shank losing itself down in the nape of the neck. This peculiar form is made distinct not only because the down forming the spear-head is twice as long as the rest of the head-growth, but while the short down of the head is of a dark grayish color, the long down of the spear-head has its edges sharply defined in black shading to a fulvous toward the centre. Bill dark horn color. When the bird is half grown and the quills are just appearing, the down on the head has about disappeared, leaving the whole head black and nearly bare, the very minute and scattered growth of feathers being scarcely noticeable. The down on the body is still as dense as ever and very long. The color of the whole anterior half of the bird has become redder and richer, while the posterior half has become darker. The bill is black throughout. The down is now more than an inch in length, and the bird presents a grotesque appearance, very much as if it had covered its nakedness with a miniature faded buffalo skin over coat.

Parabuteo unicinctus harrisi. HARRIS'S HAWK.

Downy Stage.—All the upper parts uniform light tawny; underparts and lores white with a tawny tinge on jugulum. Bill light brown horn color above and yellowish white below. Just before the feathers appear the down loses most of its tawny color above and the young bird looks much whiter.

First Plumage.—The crown, remiges, long scapulars, and zone of tail deep rich blackish brown with purplish reflections; all the feathers of crown, back, and rump tipped and edged lightly with chestnut. Feathers over eye so broadly edged with light chestnut as to form a superciliary line. Wing-coverts with more extensive and darker chestnut than in adult. Upper and lower tail-coverts and terminal tail-band white tinged with tawny. Throat streaked with black and tawny. Feathers of breast black and tawny, and those of belly black and white. Tibia dark chestnut with narrow bands of fulvous. Feet yellow; claws black; bill dark horn color.

Buteo albicaudatus. WHITE-TAILED HAWK.

I have in my collection six nestlings, taken in Texas, which are very interesting and peculiar. Two of them are two days old, two four days old, one about a week old, and the sixth about half grown, with its quills and first feathers just started.

Downy Stage.—Well covered with cottony down, most dense on head and wings, and thinnest on throat and belly. The color underneath is richer on upper back and wings, shading into brown on back of neck. Whole top of head thickly covered with soft hair-like feathers from half an inch to three-quarters of an inch in length, bristling up individually and showing, when looked at from above, the pale tawny color of their

downy bases. The color of these long hair-like feathers which crown the head is dark brown, almost black, on four of the very young, and lighter brown on one of the specimens, which is the only marked variation among the five youngest. A narrow black band encircles the eye, and the eyelids are jet black. The bill is glossy black above and horn color below. The feet are flesh color, the claws pale in very youngest, and shading into horn brown in the specimen a week old. These interesting young Hawks, with their varying shades of color, and their tall, erect head-tufts, present a most peculiarly pugnacious appearance.

Half-grown young, still in the downy stage, with first feathers just started :—The entire bird is thickly covered with long white down suffused with tawny ash on neck, sides, belly, and rump. On every part of the body feathers have started through the down; they are hardly noticeable on the throat, but plainly seen on head and belly, and most developed on back and wings. All the feathers, excepting primaries, rectrices, and on the jugulum, are very dark brown, almost black, and strongly tipped with rufous on scapulars, wing-coverts, and secondaries, and with tawny mixed with white on other parts. The primaries project an inch from the quill-sheath and are black, tipped almost imperceptibly with white. The rectrices project only half an inch from the quill-sheath, are tipped and edged with white, and are of that hoary ash color so prevalent in full-grown birds of first year. The feathers starting on the jugulum and breast, which can be noticed by parting the down, are tawny. Many of the long, erect, hair-like filaments which crown the head are, with their downy bases, still attached to the new outgrowing feathers and give the youngster a very unkempt appearance. The black bands around the eye and the black of the eyelids have almost disappeared. The bill is now approaching a horn color, having lost its black gloss. The claws are deep blue black.

Polyborus cheriway.—AUDUBON'S CARACARA.

Downy Stage:—Fur-like down fully half an inch in length covering the entire chick; this down is not very thick except on the crown. The color is chiefly light buff shading to cream on throat; dorsal stripe and flanks light brown; a patch of darker brown on shoulder and edge of wing. Crown to middle of eye and nape deep reddish brown. On back and belly, underneath the down, can be seen the dark flecks in the skin containing the embryo feathers.

Chordeiles texensis. TEXAN NIGHTHAWK.

First Plumage:—Remiges and rectrices brown, strongly edged, tipped, spotted, and barred with rufous; no white spot on wings or tail. Feathers of crown, back, wing-coverts and rump, speckled gray, showing a black arrow-tip in lower half and all tipped with fulvous. The only white is a narrow band over eye. Entire underparts gray, strongly suffused with fulvous and covered with narrow dark bars.

Parus atricristatus. BLACK-CRESTED TITMOUSE.

First Plumage:—Upper parts dark ashy plumbeous strongly washed with olive. Lores ashy white. Crest extends to bill, thus leaving no frontlet. On two of my three specimens, which were shot same place and day (Frazar, Rio Grande City, Texas, June 11th, 1880), the crest is mixed dark ash and black, and on the other the crest color is same as back but a darker shade.

I have also a female young of the year taken by Mr. Bourbois at Lomita, Texas, in July of 1879, which has a crest of mixed black and ash, so it is fair to say that in most cases the first plumage has the black crest mixed with ash and without the gloss peculiar to adults. The sides of head and jugulum are dark ashy white. Throat and middle of belly lighter. Sides washed with very pale chestnut, almost a buff, and a wash of same covers upper belly and lower tail-coverts. The quills are edged and tipped with hoary. Bill horn color. Feet plumbeous.

DESCRIPTIONS OF TWO NEW SUBSPECIES OF TITMICE FROM TEXAS.

BY GEORGE B. SENNETT.

Parus atricristatus castaneifrons, subsp. nov. CHEST- NUT-FRONTED TITMOUSE.

♂ ♀. *Adult:*—Entire upper parts plumbeous, washed faintly with olive. Crest thin, about one inch in length, restricted to middle portion of the crown; it is of a dark brown color, mixed on edges with ashy plumbeous; edges of crown and sides of both head and neck ashy plumbeous. Frontlet at base of crest chestnut. Lores white. Underparts light ash, washed with chestnut on sides, and with faint traces of same on breast and under tail-coverts. Tail slightly browner than back; wings browner than tail. Size, that of *Parus bicolor*, but with bill even larger. Bill black. Feet dark lead color.

HABITAT. Bee Co., Texas.

Dimensions:—Adult ♂, type. No. 3106; collector's No. 33; J. M. Priour, Bee Co., Texas, April 4, 1886. Wing, 3.12; tail, 2.95; tarsus, .77; bill, .42.

Adult ♀, type. No. 3107; collector's No. 34; J. M. Priour, Bee Co., Texas, April 4, 1886. Wing, 2.95; tail, 2.95; tarsus, .77; bill, .45.

Adult ♂, No. 3108; collector's No. 66; J. M. Priour, Bee Co., Texas, April 9, 1886. Wing, 3.11; tail, 3.; tarsus, .83; bill, .42.